IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

JAMES

Serial No. 09/029,581

Filed: 06 March 1998

Title: DATABASE ACCESS

Atty Dkt. 36-1116

C#   M#

Group Art Unit: 2771

Examiner: J. Mills

Date: July 14, 2000

Assistant Commissioner for Patents
Washington, DC 20231

Sir:

RESPONSE

This is a response/amendment/letter in the above-identified application and includes an attachment which is hereby incorporated by reference and the signature below serves as the signature to the attachment in the absence of any other signature thereon.

Fees are attached as calculated below:

Total effective claims after amendment **0** minus highest number
previously paid for **20** (at least 20) = 0 x $ 18.00 $ 0.00

Independent claims after amendment **0** minus highest number
previously paid for **3** (at least 3) = 0 x $ 78.00 $ 0.00

If proper multiple dependent claims now added for first time, add $260.00 (ignore improper) $ 0.00

Petition is hereby made to extend the current due date so as to cover the filing date of this paper and attachment(s) ($110.00/1 month; $380.00/2 months; $870.00/3 months) $ 110.00

Terminal disclaimer enclosed, add $ 110.00 $ 0.00

☐ First/second submission after Final Rejection pursuant to 37 CFR 1.129(a) ($690.00) $ 0.00
    ☐ Please enter the previously unentered   , filed
    ☐ Submission attached

☐ Request for Continued Examination pursuant to 37 C.F.R. § 1.114 ($690.00) $ 0.00
    ☐ Please enter the previously unentered   , filed
or ☐ Required submission attached

        Subtotal $ **110.00**

If "small entity," then enter half (1/2) of subtotal and subtract   -$ 0.00
    ☐ Statement filed herewith

Rule 56 Information Disclosure Statement Filing Fee ($240.00) $ 0.00

Assignment Recording Fee ($40.00) $ 0.00

Other: 0.00

TOTAL FEE ENCLOSED $ **110.00**

The Commissioner is hereby authorized to charge any <u>deficiency</u> in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140. A <u>duplicate</u> copy of this sheet is attached.

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NIXON & VANDERHYE P.C.
By Atty: Larry S. Nixon, Reg. No. 25,640

Signature: _Larry S. Nixon_

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Sir:

RESPONSE

In response to the <u>final</u> Office Action dated 03/15/00, reconsideration of this application is requested in view of the following remarks.

The Examiner's attention is directed to the attached letter to the Chief Draftsperson together with suggested drawing amendments as shown in red ink on the attached photocopies of certain Figures. It is not clear from the undersigned's file that the attached photocopies with red markings were actually forwarded with the earlier December 22, 1999 letter to the Chief Draftsperson. It is also noted that the Examiner did not indicate any response to the earlier letter to the Chief Draftsperson. Accordingly, this further duplicate letter to the Chief Draftsperson is being forwarded herewith for the Examiner's attention and action.

The rejection of claims 1-8 under 35 U.S.C. §102 as allegedly anticipated by Brunner '971 is again respectfully traversed.

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Brunner '971 is directed towards a technique for automatically generating a graphical user interface (GUI) for database inquiries -- without the need to recode or recompile the software that generates the GUI. Except for the fact that the exemplary embodiment in Brunner happens to use a database employing a local cache, it has nothing whatever to do with maintaining consistency between a master database and a local cache.

As noted in the applicant's introductory remarks in the specification, some databases with local caches do not even use an index. The undersigned cannot tell from a careful study of Brunner '971 whether the exemplary embodiment used therein employs an index feature or not. In any event, it would be immaterial to the GUI generation algorithm that is at the heart of the Brunner '971 teaching.

By contrast, the applicant's claim 1 is directed to a method for checking the consistency of an item of data in a cache with a master database. Brunner '971 is not in any way concerned with this aspect of database management. No doubt Brunner '971 assumes that there is <u>some</u> technique employed for maintaining <u>some level</u> of consistency between the local cache and the master database. However, Brunner '971 does not provide even a hint as to how such consistency is to be achieved -- or even what level of consistency is expected. Once again, consistency between the cache and master database is something that Brunner '971 is simply not concerned about.

Furthermore, applicant's claim 1 requires that a first key stored in association with a data item in the cache be compared with a second key stored in association with an <u>index</u> entry for that term in the master database. As noted above, Brunner '971 does not even teach whether his

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database embodiment includes an index feature at all! Clearly, there is absolutely no teaching in Brunner '971 of any comparison between something in an index entry at the master database with something at the local cache.

Applicant's claim 2 is directed to a method for retrieving data from a local cache or master database of the type which includes an index containing entries corresponding to one or more of the items in the master database. Once again, there is no indication in Brunner '971 that the exemplary database therein even utilizes such an index feature.

Furthermore, claim 2 requires reading a first key at the cache, reading a second key associated with an index entry at the master database, comparing those two read keys and then retrieving the requested data from the local cache in the event that the compared keys are the same or from the master database if the two compared keys are different. There is absolutely no such teaching (or suggestion) anywhere in Brunner '971.

Claim 3 requires the first and second keys to be time stamps. Where is there any conceivable teaching of this in Brunner '971?

Claim 5 is directed to a database file server that includes means for accessing an index of the database and reading an index entry for requested data items, the index entry including a second key for the stored item of information. Once again, where is there any teaching in Brunner '971 that the master database includes any type of index feature? And even if it did, where is there any further teaching in Brunner that such index would include a second key associated with the index entry?

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Claim 5 also requires means for comparing the first key from the local cache with the second key from the <u>index</u> of the master database. Where is there any conceivable teaching of this in Brunner '971?

Claim 5 also requires means for returning an indication that the cached data item is consistent with the master database if the two keys are the same or returning a copy of the requested item of data from the master database if the two compared keys are different. Where is there any possible suggestion (let alone teaching) of this in Brunner '971?

Claim 6 is directed to a database <u>index</u>. As previously noted, Brunner '971 has absolutely <u>no teaching</u> of a database <u>index</u>. Accordingly, it is literally <u>impossible</u> for Brunner '971 to anticipate claim 6 (and the body of claim 6 adds still further detail to the particular type of database index that cannot possibly find any suggestion at all in Brunner '971).

With respect, the Examiner's attempts to justify the outstanding rejection are difficult to comprehend.

For example, the Examiner alleges that "checking items between the cache database and the master database by comparing keys" is somehow to be found in Brunner '971 at column 2, lines 34 et seq. However, this section of Brunner '971 deals solely with the GUI generation and does not at all support the Examiner's allegation. Indeed, the Examiner's comments include what appears to be a quotation that <u>itself</u> demonstrates that Brunner '971 is concerned only with automatic generation of the inquiry GUI in the event that the organizational structure of the access database is changed (totally irrespective of whether the data content within a given database structure has been changed or not):

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"The user interface should be flexible so that if a change is made to the underlying database schema or model, the interface will adapt dynamically to reflect the change without the need to recode and recompile the software that generates the user interface. ..."

This section, like all of the rest of the Brunner '971 reference, is directed towards making the database inquiry GUI automatically adaptable to changes in the database <u>organizational structure</u> -- <u>not</u> to mere changes in the data content of the database. Indeed, the inquiry GUI would stay constant in spite of data content changes so long as the organizational structure of the database (i.e., its "schema or model") stays unchanged. Only if the schema or model is changed (e.g., by adding new data fields to the database or by moving rows or columns of the database to different positions, etc.), then the inquiry GUI needs to be changed to accommodate possible future inquiries directed to the newly added data fields, columns, rows, etc. of the database.

None of this has anything whatsoever to do in checking the consistency of the local cache data with the corresponding data entries in the master database. And furthermore, even if it did have something to do with maintaining consistency, it certainly has nothing to do with maintaining consistency by checking a key associated with an <u>index</u> at the master database. As previously noted, there is no indication in Brunner '971 that the master database in the exemplary embodiment even includes an index feature at the master database -- let alone having a key (e.g., such as a time stamp) associated with the <u>index</u> items.

The Examiner's further comments that "the notion of consistency between the databases is brought out in this passage and the need to insure consistency part of the user interface" is not understood. The "notion of consistency between the databases" (i.e., between the local data cache and the master database) is not even mentioned in the quoted passage! Nor is it implicitly

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involved in any way with the automatic generation of a new GUI in the case of changes to the underlying database "schema or model".

The Examiner's further comment that "the comparing feature that is specifically argued by the applicant is an essential feature of the cited reference" is also not understood. Brunner '971 does not indicate any concern whatsoever with the consistency of data in the local data cache and corresponding data in the master database. Brunner '971 simply appears to <u>assume</u> that some <u>conventional</u> technique for maintaining consistency has been properly implemented. Indeed, as noted in the applicant's specification, the prior art does have techniques for attempting to maintain consistency between a local data cache and a master database. However, those conventional prior art techniques do <u>not</u> involve a key (e.g., version number, time stamp or the like) associated with an <u>index</u> entry at the master database.

To the extent that the Examiner has copied text from the first Office Action throughout the remainder of page 3 of the current "final" Office Action alleging that the Brunner '971 reference somehow <u>does</u> teach the use of an index at the master database and other features of the applicant's claimed invention, such allegations are clearly erroneous.

Should the Examiner continue to disagree on these points, a personal interview is respectfully requested. Telephone attempts to arrange such an interview have already been initiated. However, to avoid further time extension fees, this formal written response is now being filed together with a Notice of Appeal.
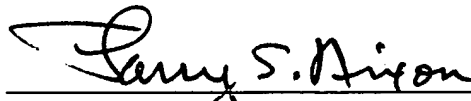
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Accordingly, this entire application is now believed to be in allowable condition and a

formal Notice to that effect is respectfully solicited.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: _____

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